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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/501,513	02/07/2005	Mats Sagfors	P15287-US1	4394

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EXAMINER	
SHEDRICK, CHARLES TERRELL	
ART UNIT	PAPER NUMBER
2617	
MAIL DATE	DELIVERY MODE
02/03/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/501,513	SAGFORS ET AL.	
	Examiner	Art Unit	
	CHARLES SHEDRICK	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 October 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *50-53,55-60,62 and 63* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *50-53,55-60 and 62-63* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 10/27/08 have been fully considered but they are not persuasive.

2. Applicant argues that he Applicants' invention is directed to allocation of channel resources in a wireless communications system. To efficiently allocate channel resources, the invention sniffs data transmissions for information related to application-level data object size. Based on such data object size, a future data rate is predicted and appropriate radio resources are allocated. Kamm fails to teach that combination of elements. In rejecting claim 54, the limitations of which are now incorporated in claim 50, the Examiner points to column 14, lines 55-61, asserting that Kamm discloses "channel assignment predictions." Predicting a channel assignment, however, is not the same as allocating radio resources based on a predicted future data rate, wherein the prediction is based on a detected application-level data object size. Therefore, Kamm fails to anticipate claim 50. Whereas independent claim 57 includes analogous limitations, Kamm also fails to anticipate that claim.

3. However, The Examiner respectfully disagree. Kamm teaches that the MDG will use the channel assignments predictions and the channels assignments of the adjacent cells of a MDBS which is requesting a channel hop to approve or veto a channel selection. col. 9 lines 60-66 teaches at least the monitoring involves the package size. Therefore, the Examiner respectfully submits that Kamm still reads on allocating radio resources comprising the step of predicting a future data rate from the information related to the data object size (e.g., heavy traffic loads, average package size and channel capacity are all related to data rate(i.e., data unit per unit of

time which is directly related to bandwidth-throughput). The monitoring indications of a heavy load is a further indication of a high data rate of traffic and thus a channel can be newly assigned that can handle the rate or even off load some of the congestion on the previous channel). The channel assignment is based on the current rate versus a future rate. In order to determine the these factors it follows that there's a logical prediction or estimate of the rate subsequent the channel assignment based on the monitoring

4. Claims 51-53, 55 and 56 are dependent from claim 50, and claims 58-60, 62 and 63 are dependent from claim 57, and include the limitations of their respective base claims, those claims are also anticipated by Kamm for at least their dependence and reasons noted above.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 50-53, 55- 60 and 62-63 rejected under 35 U.S.C. 102(b) as being anticipated by Kamm et al. US Patent No.5,457,680, hereinafter, "**Kamm**".

Consider **claims 50 and 57**, Kamm teaches means and a method of channel resource allocation in a wireless communications system (**e.g., see at least abstract, col. 3 line 65 – col. 4 line 3**), said method comprising the steps of: sniffing one or more data transmissions to or from a data provider for information within one or more application-level data packets(**i.e., the packets are continuously monitored)(e.g., see col. 9 lines 44-45, figure 1k, the information can be obtained via continuously monitoring and RF sniffing as noted in col. 13 lines 27-28, col. 14**

lines 33-37), the information being related to application-level data object size(i**.e., the information being monitored/sniffed is directly and/or indirectly *related* to the data object size)(e.g., see at least claim 11 which indicates the size of the packet is monitored**); and allocating radio resources as a function of said data object of size (**e.g., see col. 4 lines 4-10 where packet sizes are measured against a threshold value, col. 9 line 60 – col. 10 line 3, figure 1k where forward and reverse channels are measured**), wherein said step of allocating radio resources comprises the step of predicting a future data rate from the information related to data object size (**i.e., the channel assignment predictions are related to rates in order for the system to work more efficiently. See at least col. 14 lines 55-61 and remarks above in response to arguments**).

Consider **claims 51 and 58 and as applied to claims 50 and 57**, Kamm teaches wherein said step of allocating radio resources comprises the step of selecting one or more channel characteristics (**e.g., power or signal strength in at least col. 10 lines 21-24**).

Consider **claims 52 and 59 and as applied to claims 50 and 57**, Kamm teaches wherein said one or more data transmissions are sniffed in an uplink direction **(e.g., see at least figure 1k packets are monitored on the reverse and forward links)** .

Consider **claims 53 and 60 and as applied to claims 50 and 57**, Kamm teaches wherein said one or more data transmissions are sniffed in an downlink direction **(e.g., see at least figure 1k packets are monitored on the reverse and forward links)** .

Consider **claims 55 and 62 and as applied to claims 51 and 58**, Kamm teaches wherein said channel characteristics are selected from the group consisting of: data rate; dedicated or shared usage; scheduling; modulation; spreading code spreading factor; and transmission power

(**e.g., signal strength being transmitted col. 10 lines 21-24**).

Consider **claims 56 and 63 and as applied to claims 50 and 57**, Kamm teaches wherein one or more of said application-level data packets are cached prior to being transmitted using said radio resources(**i.e., buffered as noted in col. 7 lines 65-67**).

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHARLES SHEDRICK whose telephone number is (571)272-8621. The examiner can normally be reached on Monday thru Friday 8:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester Kincaid can be reached on (571)-272-7922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Charles Shedrick/
Examiner, Art Unit 2617

/Lester Kincaid/
Supervisory Patent Examiner, Art Unit 2617